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| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/780,878 | MOTIKA ET AL. | |
| | Examiner | Art Unit | |
| | Christine T. Tu | 2117 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed June 07, 2007.
2. ☒ The allowed claim(s) is/are 1-4, 6-9, 11-20 and 26-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none">1. <input type="checkbox"/> Notice of References Cited (PTO-892)2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none">5. <input type="checkbox"/> Notice of Informal Patent Application6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____7. <input type="checkbox"/> Examiner's Amendment/Comment8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance9. <input type="checkbox"/> Other _____ |
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CHRISTINE T. TU
Primary Examiner

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1. The following is an examiner's statement of reasons for allowance:

The present invention pertains an electronic circuit testing apparatus and the method thereof for testing, diagnosing or monitoring an operation of an electronic circuit.

The prior arts, however, do not teach the method of testing, diagnosing, or monitoring an operation of an electronic circuit, comprising the combination features of interrupting a clock signal used to provide a clocking for a normal operation of the circuit, using a second clock signal to repeatedly cycle through a predetermined cycle of operations for the circuit, and collecting data on an emission of photons that occur from the circuit during the repeated cycling of the predetermined cycle of operations.

The prior arts also do not teach the method of testing, diagnosing, or monitoring an operation of an electronic circuit, comprising the combination features of mounting the electronic circuit such that a photodetector can detect photon emissions due to an operation of the electronic circuit, exercising the electronic circuit with a BIST sequence, determining a position in the BIST sequence where failure occurs, and recycling a plurality of times through a sequence of the BIST at the determined position in the BIST, the photodetector detecting a photon emission due to activity of the electronic circuit during the recycling, the recycling thereby causing an amplification effect of the photon emission during the recycling.

Hence, the prior arts of record do not anticipate nor render obvious the claimed inventions. Thus, claims 1-4, 6-9, 11-20 and 26-30 are allowable over the prior arts of record.

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In addition, the prior arts do not teach the electronic circuit testing apparatus comprising the combinations of a first clock signal line to operate the electronic circuit during a normal sequencing of operations, an interrupt signal line causing the first clock signal to stall in a middle of a cycle, a second clock signal line to operate the electronic circuit during a period when the first clock signal is installed, and a signal line to cause a data signals sequence in the circuit to flow in a reverse direction during a period the first clock signal is stalled.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (571) 272-3831. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christine T. Tu
Primary Examiner
Art Unit 2117

July 20, 2007